Government publishes proposals for package of transitional measures to support research and innovation sector affected by Horizon Europe delays

Today (Wednesday 20 July) the government has set out a new package of transitional measures to ensure the stability and continuity of funding for researchers and businesses, which will come into force if the UK is not able to associate to Horizon Europe — the EU's research and innovation funding programme.

The UK government agreed in December 2020 to associate to Horizon, Copernicus, Euratom Research & Training, and Fusion for Energy as part of the Trade and Co-operation Agreement, and it remains the UK's position that association would benefit all parties, enabling countries across Europe to work together on shared challenges.

However, in light of the EU's continued delays, the UK has made clear that should association not be completed, our priority is to protect and support the research and innovation (R&I) sector, with the funding allocated for association being re-directed to new R&D programmes, including those designed to support international partnerships.

Transitional measures will ensure there is no funding gap for the R&D sector, and will provide immediate funding opportunities for researchers, institutions and businesses while longer term measures are established.

The transitional measures set out today include:

- the <u>UK Guarantee</u> scheme already in operation
- funding for successful, in-flight UK-based applicants to Horizon
- uplifts to existing UK talent schemes
- uplifts to innovation funding and support for businesses, in particular SMEs
- uplifts to international innovation schemes to support international business collaborations
- funding for research institutions most affected by the loss of Horizon Europe's talent funding
- continued Third Country Participation in Horizon Europe

The measures will be delivered by trusted and experienced UK bodies, using existing and well-established UK funding and support mechanisms, and will be ready to launch if the UK is unable to associate to Horizon Europe.

Today's publication also sets out a preliminary vision for a long term, alternative programme to Horizon should it be required, which will focus on four main themes to complement our existing R&D investments: Talent, End to

End Innovation, Global Collaboration and investments in the R&D system.

The long-term programme will be established as quickly as possible, and the government is already in conversation with researchers and businesses to determine priorities for a programme that would help build on UK strengths and develop new capabilities, while distributing resource and support for the sector right across the country, in line with the Levelling Up agenda. Our detailed proposals will be published in due course.

The government is also developing a comprehensive plan of alternatives to Euratom R&T, Fusion for Energy, and Copernicus programmes, including interim measures.

Read the full details of the transitional measures.

<u>Government sets out plan to reduce</u> <u>water pollution</u>

New plans to help safeguard England's precious protected sites by driving down nutrient pollution and allowing for the construction of sustainable new homes for families across the country were announced by the Government today (Wednesday 20 July).

Nutrient pollution is an urgent problem for freshwater habitats and estuaries which provide a home to wetland birds, fish and insects. Increased levels of nutrients like nitrogen and phosphorus can speed up the growth of certain plants, disrupting natural processes and devastating wildlife. While the government has taken substantial steps to tackle the issue, today's measure will fast track progress in hotspot areas while unlocking homebuilding across the country.

Due to excess levels of nutrients in certain English water catchments and as result of complex and bureaucratic EU-derived domestic legislation and case law, Local Planning Authorities can only approve a plan or a project if they are certain it will have no negative effect on legally protected sites for nature.

Natural England, in its statutory role as an adviser on the natural environment, has advised a total of 74 Local Planning Authorities on the nutrient impacts of new plans and projects on protected sites where those protected sites are in unfavourable condition due to excess nutrients.

Government plans announced today will see:

• A new legal duty on water companies in England to upgrade wastewater treatment works by 2030 in 'nutrient neutrality' areas to the highest

achievable technological levels.

• A new Nutrient Mitigation Scheme established by Natural England, helping wildlife and boosting access to nature by investing in projects like new and expanded wetlands and woodlands. This will allow local planning authorities to grant planning permission for new developments in areas with nutrient pollution issues, providing for the development of sustainable new homes and ensuring building can go ahead. Defra and DLUHC will provide funding to pump prime the scheme.

Today's measures will not only tackle the long-term issue of nutrient pollution by significantly reducing pollution from existing homes in sensitive areas. Developers will be able to purchase 'nutrient credits' which will discharge the requirements to provide mitigation.

Natural England will accredit mitigation delivered through the Nutrient Mitigation Scheme, enabling Local Planning Authorities to grant planning permission for developments which have secured the necessary nutrient credits. This will ensure developers have a streamlined way to mitigate nutrient pollution, allowing planned building to continue and creating new habitats across the country.

These plans build on our comprehensive plan to significantly reduce water pollution, including proposed targets under the Environment Act to reduce the key sources of river pollution; a plan for the <u>largest water company infrastructure</u> project ever to reduce discharges from storm overflows; new funding to the Environment Agency to increase farm inspections to at least 4,000 inspections a year by 2023 and new farming schemes that will reward farmers and land managers for environmental actions, such as introducing cover crops and buffering rivers, to reduce run-off.

Environment Secretary George Eustice said:

The plans we have announced today will protect England's wildlife and precious habitats from the impacts of nutrient pollution, whilst ensuring communities receive the new homes they need.

This is just one part of ongoing Government action to improve water quality across the country, from targets in our world-leading Environment Act to action on storm overflows.

Levelling Up Secretary Greg Clark said:

It is essential that new homes do not impair the quality of our rivers, streams and wetlands. These measures will ensure the development can take place, but only where there is practical action taken to protect our precious aquatic habitats.

Natural England chair Tony Juniper said:

Wetlands and estuaries are home to a wide variety of internationally-important wildlife species, from wading birds to insects and from fish to special plants. Pollution from excess nutrients is causing serious damage to many of these fragile places and if we are to meet our national targets for Nature recovery it is vital that we take concerted, coordinated action to protect them.

The duty on water companies and the Nutrient Mitigation Scheme mark significant steps forward, and will help join up the various approaches to improving water quality and bring about multiple other benefits. They will provide the tools needed to help planning authorities, developers and water and land managers to both build new homes and support the healthy rivers and lakes that are vital for restoring Nature and creating beautiful places for everyone to enjoy.

The new legal duty on water and sewerage companies in England to upgrade certain wastewater plants will be introduced via a Government amendment to the Levelling Up and Regeneration Bill. We want these improvements to be factored in for the purposes of a Habitats Regulation Assessment.

These upgrades will need to be made in a way that tackles the main nutrient(s) causing pollution at protected wildlife sites, for example the addition of metal salts to wastewater, which can be used in combination with wetlands and reedbeds to improve the performance of treatment works.

Where possible, the Government will work with water companies to identify where these upgrades could be accelerated and delivered sooner. Our proposed Environment Act target to tackle wastewater pollution across the country will see upgrades brought in elsewhere in addition to those required by the new duty on companies, on a slightly longer timeframe.

The Nutrient Mitigation Scheme will create new wetlands and woodlands in partnership with green groups and other privately led nutrient mitigation schemes. It follows DLUHC's initial £100,000 (per catchment) package of support for planning authorities.

This national scheme will support investment in new habitats which will 'soak up' or mitigate the impacts of unavoidable nutrient pollution. These new or expanded wildlife habitats will also increase people's access to nature.

The scheme will be open to all developers, with priority given to smaller builders who are most affected. Developers can also continue to put their own mitigation schemes in place should they choose. Natural England will work with, not crowd out, new and existing private providers and markets for nutrient offsets wherever they exist.

The scheme is due to open in the Autumn. All affected areas can continue to access practical support from the government and Natural England in meeting nutrient neutrality requirements. Natural England will deliver the scheme by establishing an 'Accelerator Unit', with the support of Defra, DLUHC, the Environment Agency and Homes England.

This announcement will support the delivery of the tens of thousands of homes currently in the planning system, by significantly reducing the cost of mitigation requirements. The mitigation scheme will make delivering those requirements much easier for developers.

Update on the Nutrient Mitigation Scheme - November 2022

Natural England has been working closely with Defra and DLUHC, alongside the Environment Agency, Forestry Commission, Homes England, the Planning Advisory Service and Local Planning Authorities (LPAs) to develop the scheme across affected catchments in England. The first mitigation projects are currently being negotiated with two partners in the Tees catchment. Investment in feasibility studies in five further catchments is underway to determine the schemes next mitigation sites. Natural England will invite applications from developers for mitigation credits in the Tees before the end of March 2023.

From December 2022, Natural England will approach landowners in a targeted way to invite them to offer their land as potential sites for nutrient mitigation. These sites will start to provide the mitigation needed by LPAs and developers, and we will expand across the country to facilitate building thousands of new homes as well as making a major contribution to nature recovery through the creation of new wetlands.

Credits from the government backed scheme will be offered in batches which any developers requiring credits can apply for. Where demand for credits exceeds supply, applications will be prioritised to minimise nutrient neutrality related delays to development, to enable development of the most homes most quickly, to facilitate small and medium enterprises, and to support the delivery of affordable and social housing. Information for developers on credit availability and price will be released ahead of the first credit sales.

Further information:

- The announcement today builds on a <u>package of practical and financial</u> <u>support</u> provided announced in March to help local authorities in areas affected by nutrient pollution to deliver the homes communities need.
- In England, 27 water catchments (encompassing 31 internationally important water bodies and protected sites) are in unfavourable status due to nutrient pollution.
- Natural England has advised a total of 74 Local Planning Authorities that plans and projects should only go ahead if they will not cause additional pollution to these legally protected sites.
- They have issued guidance and tools on an approach called 'nutrient neutrality', to mitigate the impact of nutrient pollution so that development can go ahead.

• The package announced today is intended to improve the water environment and reduce the amount of mitigation needed in the long term and make it easier to find in the short term.

£1 million in contracts awarded to enhance the UK's space capabilities

- £1 million overall funding allocated to five innovative organisations to develop space technologies
- Funding achieved through the Space to Innovate Campaign Bravo Drop, a joint collaboration between the Defence Science and Technology Laboratory (Dstl) UK Space Agency and Defence and Security Accelerator
- The Space to Innovate Campaign aims to find and fund solutions to major space hurdles to promote space resilience and operational effectiveness
- The Space to Innovate Campaign Bravo Drop is the second 'challenge drop' as part of the Space to Innovate Campaign

The <u>Defence Science and Technology Laboratory</u> (Dstl), <u>UK Space Agency</u> and Defence and <u>Security Accelerator</u> (DASA) are pleased to announce that five innovators have won £1 million in funding to develop technologies for the space domain.

The funding was achieved as a result of <u>Space to Innovate Campaign — Bravo Drop</u> which invited innovators to submit their innovative technologies and solutions to help overcome the following challenge areas:

Challenge 1: Novel sensing and Intelligence, Surveillance & Reconnaissance (ISR) technologies

This challenge sought to develop technologies and demonstrations of novel sensing modes for the space domain for military and intelligence applications; both space-to-ground and space-to-space.

Challenge 2: Novel approaches to improve signal-to-noise performance of space-related communications, sensing, identification or tracking capabilities

This challenge sought to identify novel technologies, techniques, processes or algorithms that offer improvements to the overall signal-to-noise characteristics of electromagnetic systems used for Defence and / or Security space domain applications.

Air-Vice Marshal Paul Godfrey, Commander, UK Space Command, said:

"This is an exciting time for the UK's space sector. It's great to see companies across the union continuously challenging the norms and improving the UK's ability to operate effectively and safely in space through innovative technologies.

"Bravo Drop is the next part in the collaboration between Government, Defence, and industry and is crucial to our mission to make space safe, secure, and sustainable for all generations."

Dr Mike O'Callaghan, Dstl Space Programme Manager, said:

"This is a hugely exciting time for Dstl with the launch of two satellite missions from the UK later this year. Accelerating the development of these technologies could enhance future space operations and contribute to improved space domain awareness, as well as more secure communications. We look forward to working with all the winners."

Blast off to the winners

Five projects have been awarded Space to Innovate Campaign — Bravo Drop funding to fast-track their novel ideas. The winners are:

AltaRange Ltd

Bravo Drop funding: £117,700

AltaRange Ltd's project aims to demonstrate the technical and commercial viability of a Space Surveillance and Tracking (SST) service for next generation space operations involving spacecraft in proximity to one another, to enable better in-space reconnaissance and spacecraft monitoring.

Slipstream Engineering Design Ltd

Bravo Drop funding: £ 199,054

This project aims to deliver an Adaptive Radio Platform (ARP) for space applications through the development and integration of a Software Defined Radio (SDR). This will enable flexible radio products that focus on efficient technologies which are power and spectrum scalable.

Fraunhofer UK Research Ltd and Fraunhofer Centre for Applied Photonics

Bravo Drop funding: £318,152

This project aims to develop innovative robust, high-reliability and low-SWaP (size, weight and power) hybrid photonic integrated circuits (PICs), which will enable technology for space-based optical clocks and quantum sensors.

Astroscale

Bravo Drop funding: £ 196,466

Astroscale's project aims to determine the utility of hyperspectral imaging/multispectral imaging (HSI/MSI) capability for novel space-to-space (S2S) imaging applications, which is essential for intelligence gathering and threat assessment.

AVoptics Ltd

Bravo Drop funding: £195,920

This project aims to develop a novel, high-gain and low-noise optical photodetector material to realise higher-speed/longer-range Free Space Optical Communication (FSOC) links, to enable inter-satellite and satellite-to-platform high bandwidth communication.

What is the Space to Innovate Campaign?

The space domain, which includes satellites and space-based services, is vital to modern life, enabling a range of civilian and military activities. Any form of disturbance to UK space capabilities, whether that is natural or intentional, can cause a severe disruption to UK prosperity.

The Space to Innovate Campaign seeks proposals that can maintain the UK's freedom of action in the space domain by developing future space technologies that enhance and protect space military and civil potential.

The campaign format is unique from other DASA competitions and comprises space-related challenges that are released periodically.

What happened in the Space to Innovate Campaign — Alpha Drop competition?

The Space to Innovate Campaign — Bravo Drop follows on from the Alpha Drop, where £1.6 million worth of contracts were awarded to:

- EESE, University of Birmingham
- Goonhilly Earth Station Limited
- Spectra Medical Limited
- University of Warwick
- University of Strathclyde
- 14 AI Innovation LLP
- University of Strathclyde
- Rocket Communications

The Space to Innovate Campaign — Alpha Drop aimed to identify visualisation tools to enable space operators to exploit information gathered from multiple data sources, and novel methods for characterising objects in space and their intent. Learn more here.

British Embassy Reykjavik launches

Icelandic children's book

On 31 August 2022, the British Embassy in Iceland will be launching the first ever Icelandic children's book about careers of the future.

The book aims to inspire the next generation with amazing careers they've never even heard of, as well as teach them that everyone is equal.

Written for children aged 5 to 12 years old, 'Tæknitröll og íseldfjöll' (Technical Trolls and Ice Volcanos) introduces children to what will be some of the most interesting and important careers in Iceland over the next 20 years.

With advances in quantum computing, robotics, nanotechnology and space travel, there will be a huge variety of opportunities opening up in the future. 'Tæknitröll og íseldfjöll' introduces children to 30 exciting careers, from arctic scientist to aquaculture entrepreneur, cobot matcher to telesurgeon.

This new book also highlights diversity, equality and inclusion, 3 values that the <u>Foreign Commonwealth and Development Office (FCDO)</u> is working hard to place at the forefront of British foreign policy.

Studies have shown that children as young as 5 years old think that people who look less similar to themselves are less kind, and that girls aren't as clever as boys. This book is full of diverse characters and aims to break down these stereotypes at the earliest possible age.

It shows children a variety of characters that all have different backgrounds and stories to tell, just like in real life. By including LGBTQ+, different genders and skin tones, physical differences and disabilities and mental health, it shows children that everyone is equal.

The book was written by Dr Bryony Mathew, British Ambassador to Iceland, and published by the British Embassy in Reykjavik. The embassy will be giving out 1,000 copies of the book to children, teachers, schools and libraries across Iceland, helping to further strengthen UK-Iceland relations while inspiring Iceland's next generation.

The embassy has also produced an electronic version of the book.

Download the Tæknitröll og íseldfjöll eBook for free:

WIPO General Assemblies: UK Statement on Ukraine's Intellectual Property System

Chair,

The UK fully supports the statement delivered by Ukraine on behalf of 53 cosponsors, introducing Item 19, Assistance and Support for Ukraine's Innovation and Creativity Sector and Intellectual Property System, circulated as A/63/8. The intent of this proposal is to respond to an unfolding disaster and ensure that Ukraine's innovation community receives the support that it so urgently needs as soon as possible. The proposal is specific to the needs of Ukraine, at this critical time.

WIPO is mandated to enable innovation and creativity for the benefit of all, including by supporting the effective protection of intellectual property around the world. WIPO exists to develop a balanced and accessible international intellectual property system, which rewards creativity, stimulates innovation and contributes to economic development.

Chair, the invasion of Ukraine is having a profound impact on the ability of Ukrainian citizens and businesses to benefit from the global IP system. Attacks on the systems and infrastructure which enable creativity and economic development are incompatible with the spirit of WIPO.

Before the invasion, Ukraine was a regional Science & Technology powerhouse. The technology sector accounted for 4% of the country's GDP and Ukraine was home to around 5,000 IT companies and 285,000 IT specialists. Science and Technology has already played a role in boosting Ukraine's defensive effort. From international crypto donations, to companies like Uber and AirBnB using their platforms to help to those forced to flee violence.

The sector will also be vital to Ukraine's long-term resilience and recovery. It will be a platform on which, Ukraine can rebound — providing jobs, attracting investment and developing next-generation technology.

The UK recognises the importance of the science and tech sector, supported by on the international IP ecosystem, and the role WIPO and individual Member States can play.

Since March, for Ukrainian customers and rights holders, the UK IP Office has used the maximum flexibility available in law to consider requests for extensions of time, reinstatements and restorations. We have also recognised communications are difficult, and in some cases impossible, at this time in Ukraine. We continue to send all of our communications electronically when possible and for customers where we only hold a postal address we are arranging an alternative method of communication when those customers are able and ready to contact us.

The UK government also announced a further package of measures in late June.

For example, more than 130 Ukrainian academics are supported under the 'Researchers at Risk' programme which launched in March. A total of GBP 12.8 million will allow the programme to expand significantly to meet demand. The Researchers at Risk scheme enables Ukrainian academics to continue their research, helping Ukraine to preserve its research and innovation ecosystem. We believe that this will enable the country to rebuild and prosper.

The UK Government also provides funding to support Ukrainian academic institutions. The project aims to establish more than 100 long-term, sustainable partnerships to support Ukrainian institutions, students and researchers during the current conflict and beyond. 79 UK universities have already signed up to the scheme..

The UK government's support for the 'Re.Build' conference, organised by the Founders Forum, is enabling the UK's most innovative tech companies to contribute to Ukraine's recovery in the most effective way.

While the UK has made these and other efforts on a bilateral basis, we also believe that in the multilateral space, there are positive actions that WIPO can undertake to support the innovation landscape in the Ukraine. Examples of such actions were clearly set out in the statement by Ukraine and in the proposal A/63/8 which we support and co-sponsor.

Chair, the UN General Assembly resolution of 2 March 2022 urges the immediate peaceful resolution of the conflict in Ukraine and calls on member states and international organisations to play their part.

Accordingly, a majority of international organisations, including specialised agencies, have convened discussions on the impacts of the war, and taken decisions in support of the de-escalation of the conflict and rebuilding of key sectors of Ukraine's economy. WIPO too should make its unique contribution to this global effort.

Chair, we regret that procedural attempts, including a calling a vote, were deployed earlier in this session to prevent a discussion on this matter, and we welcome these attempts were overcome. We call on all Member States to commit to supporting IP and innovation systems in vulnerable countries and deliver that commitment through agreeing proposal A/63/8 focusing on targeted technical assistance that is urgently needed in and required by Ukraine.

Thank you, Chair.